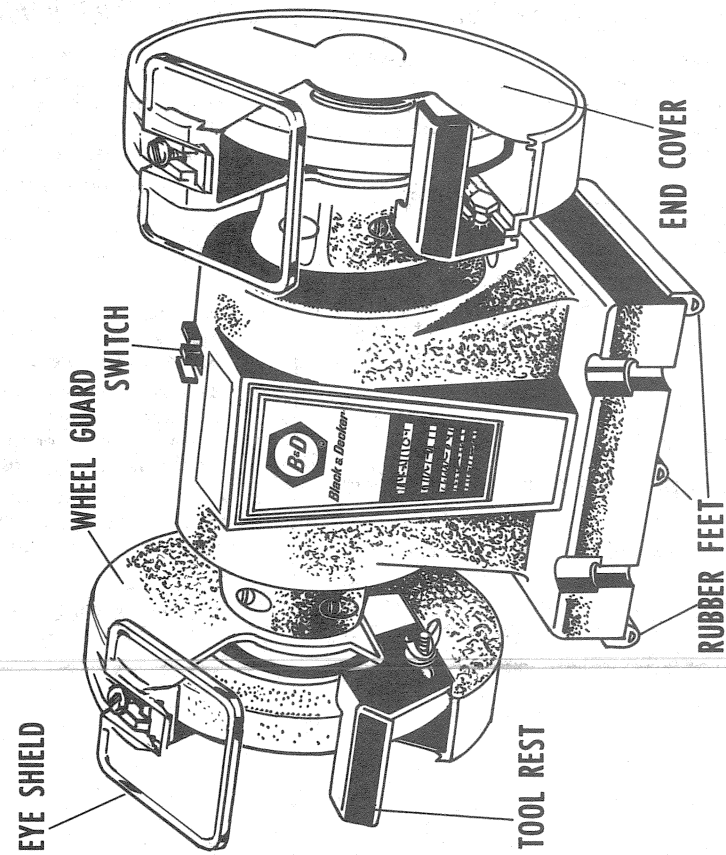


## OWNER'S MANUAL



### NO. 7900 5" BENCH GRINDER

#### SAFETY RULES FOR STATIONARY POWER TOOLS

- GROUND ALL TOOLS.** If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter wire must be attached to a known ground. Never remove the third prong.
- KEEP GUARDS IN PLACE** and in working order.
- REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed before turning on tool.
- KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- AVOID DANGEROUS ENVIRONMENT.** Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep your work area well illuminated.
- KEEP CHILDREN AWAY.** All visitors should be kept safe distance from work area.
- MAKE WORKSHOP KID PROOF** with padlocks, master switches, or by removing starter keys.
- DON'T FORCE TOOL.** It will do the job better and be safer at the rate for which it was designed.
- USE RIGHT TOOL.** Don't force tool or attachment to do a job it was not designed for.
- WEAR PROPER APPAREL.** No loose clothing or jewelry to get caught in moving parts. Rubber-soled footwear is recommended for best footing.
- USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty.
- NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if cutting tool is accidentally contacted.
- DON'T OVERREACH.** Keep your proper footing and balance at all times.
- MAINTAIN TOOLS IN TOP CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- DISCONNECT TOOLS** before servicing and when changing accessories such as blades, bits, cutters.
- USE RECOMMENDED ACCESSORIES.** Consult owner's manual. Use of improper accessories may be hazardous.
- AVOID ACCIDENTAL STARTING.** Make sure switch is off before plugging in cord.

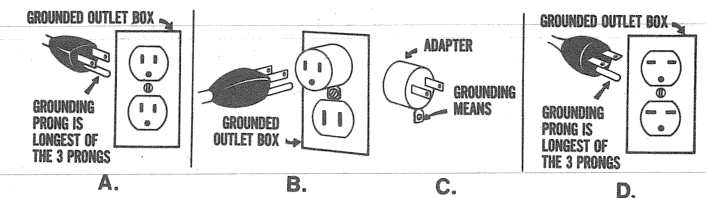
#### ADDITIONAL GRINDER SAFETY RULES

- Always use guards and eye shields. Always wear safety glasses or other eye protection when operating this tool and keep the eye shields mounted in their proper position on the wheel guard.
- Replace a cracked wheel immediately. Handle wheels carefully to avoid bumping or dropping. DO NOT use a grinding wheel that has been dropped. Before using, inspect each wheel for cracks or flaws and if these are evident, discard the wheel.
- Before mounting a new wheel, be sure that it is marked with an R.P.M. that is the same as, or higher than, the no-load speed of the grinder as marked on the nameplate. Do not overtighten wheel nut.
- Never start a grinder with anyone, including the operator, standing in line with the wheel. After installing a replacement wheel, stand to one side and allow it to revolve freely for about one minute.
- Do not grind on the sides of grinding wheels unless they are the special wheels designed specifically for this purpose.
- Do not over-tighten wheel nut.
- Use only flanges furnished with this grinder.
- CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to assure that it will operate properly and perform its intended function—check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- Bolt Bench Grinder to a bench or pedestal to prevent movement.
- Use accessories only in the proper and intended manner.

#### GROUNDING

This tool should be grounded while in use to protect the operator from electric shock.

**1. Cord-Connected Tools**—This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with an approved three-conductor cord and three-prong grounding type plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. If your unit is for use on less than 150 volts, it has a plug like that shown in Figure A. If it is for use on 150 to 250 volts, it has a plug like that shown in Figure D. An adapter, Figures B and C, is available for connecting Figure A plugs to two-prong receptacles. The green-colored rigid ear, lug, etc., must be connected to a permanent ground such as a properly grounded outlet box. No adapter is available for a plug as shown in Figure D. Adapter shown in Figures B & C is not for use in Canada.



**2. Permanently Connected Tools**—The tool should be connected to a grounded, metal-enclosed wiring system; or an equipment-grounding conductor should be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the tool.

We recommend that you NEVER disassemble the tool or try to do any rewiring in the electrical system. Any such repairs should be performed only by B&D Service Centers or other qualified service organizations. Should you be determined to make a repair yourself, remember that the green colored wire is the "grounding" wire. Never connect this green wire to a "live" terminal. If you replace the plug on the power cord, be sure to connect the green wire only to the grounding (longest) prong on a 3-prong plug.

#### SWITCH

The switch is located on the top of the housing, above the nameplate. When you stand in front of the grinder, pulling the button toward you turns the motor "ON"; pushing the button away from you (toward the back of the grinder) turns the motor "OFF".

#### EXTENSION CORD

When using this tool at a considerable distance from power source, a 3-conductor, grounding-type extension cord of adequate size must be used for safety, and to prevent loss of power and over-heating. For a 120-volt tool, the minimum size of the wires in any extension cord up to 75 feet long must be 18-gauge (American Wire Gauge). If the total extension cord length is from 75 to 100 feet, 16-gauge wire is required throughout the extension. NOTE: 16-gauge wire is heavier than 18-gauge and will carry current for longer distances without a voltage drop.

Use only three wire extension cords which have three-prong grounding-type plugs and three-pole receptacles which accept the tool's plug. Replace or repair damaged or worn cord immediately.

#### MAINTENANCE

##### LUBRICATION

Self lubricating bearings are used in the tool and periodic relubrication is not required. However, it is recommended that, once a year, you take or send the tool to a B&D Service Center for a thorough cleaning, inspection and lubrication of the gear case. Service Center addresses are shown on the guarantee card packed with your tool.

##### IMPORTANT

To assure product **SAFETY** and **RELIABILITY**, repairs, maintenance and adjustment should be performed by Black & Decker Service Centers or other qualified service organizations, always using Black & Decker replacement parts.

##### RAPID EXCHANGE CONSUMER SATISFACTION GUARANTEE

Most Black & Decker consumer portable power tools and lawn-and-garden portable power tools are guaranteed for one year from date of purchase. If you are not completely satisfied with one of these products, you will receive free of charge a replacement tool upon return of the original tool to the seller (if a participating retailer) or to a Black & Decker Service Center.

In returning a tool for replacement proof-of-purchase is required and all original standard equipment must also be returned (for example, chuck, chuck key, auxiliary handles, circular saw blades). Expendable original equipment such as sanding sheets, belts and discs and jig saw blades need not be returned. For kits and assortments only the basic power tool will be replaced.

This Rapid Exchange Satisfaction Guarantee does not cover commercial duty tools, home workshop and lawn-and-garden tools used in commercial service, lawn mowers, stationary tools, tools used in rental service or accessories. On these products a one-year guarantee on defects will apply, excluding accessories.

##### ONE-YEAR GUARANTEE

Applicable to products not covered by the Rapid Exchange Consumer Satisfaction Guarantee: Commercial Duty Tools, Home Workshop and Lawn-and-Garden Tools used in Commercial Service, Stationary Tools, Lawn Mowers, and Tools used in Rental Service.

Black & Decker guarantees for one year from date of purchase to correct by repair or parts replacement without charge any product defect due to faulty material or workmanship on Commercial Duty tools, home workshop and lawn-and-garden tools used in commercial service, stationary tools, lawn mowers, or tools used in rental service. Simply return the complete unit, transportation prepaid, to any Black & Decker Service Center or Authorized Service Station. Black & Decker assumes no responsibility for damage or faulty performance caused by misuse, careless handling, or where repairs have been made or attempted by others.

No other guarantees, written or verbal, are authorized.



THE BLACK & DECKER MFG. CO.  
Towson, Md. 21204, U.S.A.

Form No. 722246-01

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**ATTACHING EYE SHIELDS**

The two Eye Shields are made of clear, shatterproof plastic, and are attached to the top of each wheel guard as shown in Figure 1. First, slide the sheet metal nut "A" over the tang "B" in the eye shield. Slide tang under top of wheel guard and fasten shield in place with screw.

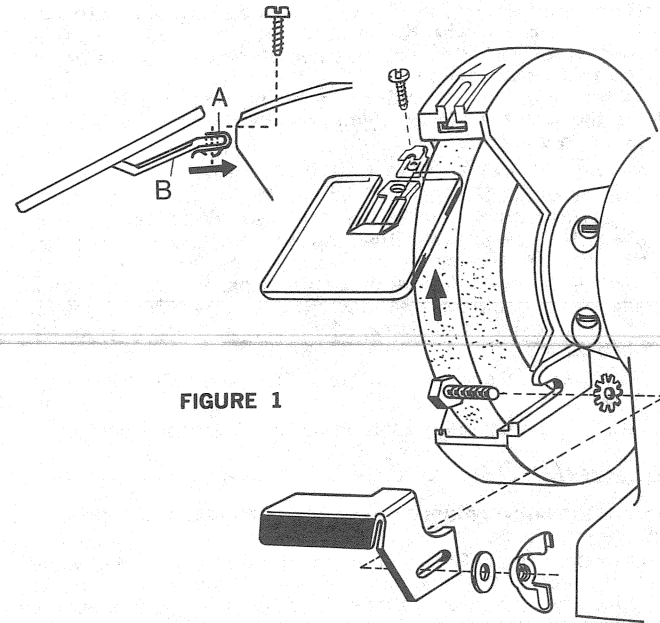


FIGURE 1

**ATTACHING TOOL RESTS**

The two Tool Rests are not interchangeable — one fits the left side of the grinder and one the right side. Be careful to assemble parts exactly as shown in Figure 1, and note that the star lock-washer goes between the wheel guard and the inside of the Tool Rest. Tighten the wing nut firmly with a clearance of 1/16" between the grinding wheel and the Tool Rest—see Figure 2.

Tool Rests are adjustable for wheel wear. Keep them adjusted so that a clearance of 1/16" is continually maintained between the wheel and the Tool Rest as the wheel wears. This clearance is very important as it will prevent any loose piece of significant size from jamming between the wheel and the Tool Rest. Such jamming could fracture the wheel, break the Tool Rest, or both.

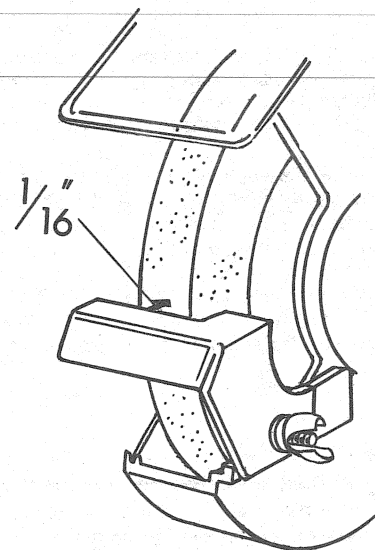


FIGURE 2

**BENCH MOUNTING**

Mounting the grinder on a bench is strongly recommended in order to prevent movement of the grinder when pressure is applied against a wheel. First, slide Rubber Feet on both sides and in the middle of the grinder base as indicated in Figure 4. Then drill three holes for 1/4" wood screws or bolts in the bench as shown in Figure 3. Use 1/4" wood screws or bolts as shown in Figure 4, and tighten down only enough to partially compress rubber feet (about 1/16"). The rubber feet will not be effective in absorbing vibration if fully compressed. When using 1/4" bolts, a second nut is required to lock against the first nut and keep grinder from loosening during operation. Never operate the grinder without the rubber feet attached to its base.

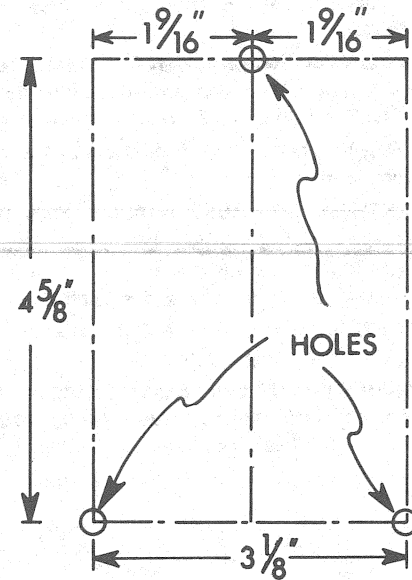


FIGURE 3

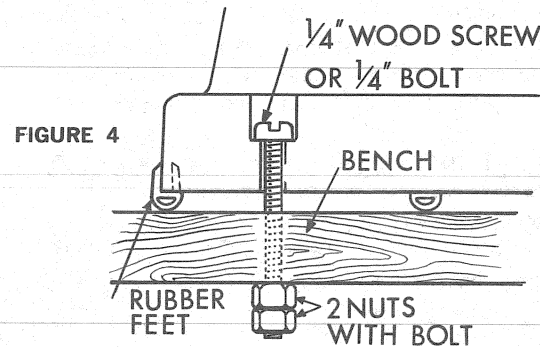


FIGURE 4

**OPERATION INSTRUCTIONS**

When you face the Bench Grinder, the wheel on your left is a 5" Grinding Wheel. This wheel is used for metal grinding and sharpening operations.

The wheel to your right is a 4" Sanding/Polishing Wheel.\* This wheel is used for sanding wood and plastic, removing paint and rust, polishing metal, honing cutting tools, smoothing rough edges on glass, and de-burring pipe, sheet metal, etc.

To operate the Bench Grinder, put on safety glasses or other eye protection and hold the work firmly. Rest the work on the tool rest and feed it slowly into the wheel at the desired grinding angle. Treat the wheel with respect . . . do not jam the work into the wheel or use unnecessary pressure.

Grind only on the face of the grinding wheel, unless you have a special wheel specifically made to permit grinding on the side of the wheel.

\* Some 5" Bench Grinders are equipped with two 5" Grinding Wheels.

**WIRE BRUSHING INSTRUCTIONS**

Wire Brushing quickly removes rust, scale or old paint. ALWAYS wear safety glasses or other eye protection when using wire wheels as pieces of wire may break off and be thrown from the rotating brush. Handle Wire Wheel Brushes carefully with gloves or rags to avoid puncturing the skin.

**BUFFING INSTRUCTIONS**

Use Cotton Buffing Wheels, normally with stick buffing compound applied to the face of the wheel (usually about 5/8" wide). Wear safety goggles for protection against particles of compound thrown off by the wheel. Remove the tool rest if it interferes with the buffing operation. Do not jam work into wheel. Hold work firmly.

**CHANGING WHEELS**

UNPLUG POWER CORD AND BE SURE THAT SWITCH STAYS IN THE "OFF" POSITION.

1. Remove End Cover—see Figure 5. Remove the screw in the back of the wheel guard. Using a screwdriver if necessary, pry the end cover outward from the wheel in the direction of arrow #1. Slide the cover backward (arrow #2) out of the grooves in the front of the wheel guard.

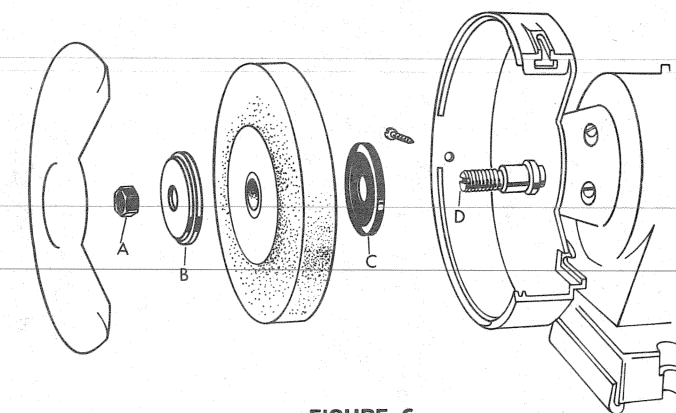
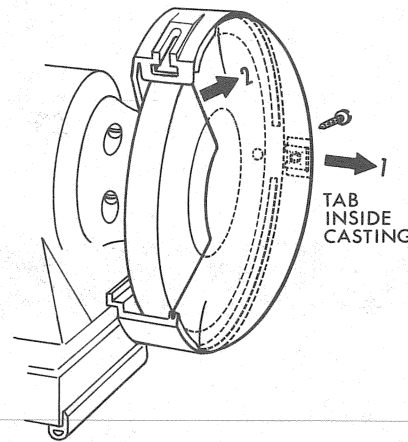


FIGURE 6

2. See Figure 6. Remove clamp nut "A" by turning it in the direction the wheel normally rotates. (The nut "A" shown is black and has a left-hand thread. The silver-colored nut at the other end of the grinder has a right-hand thread). Use a screwdriver in the end slot "D" to hold spindle when removing nuts.
3. Remove Outer Clamp Washer "B" (silver colored with small hole), Wheel, and Inner Clamp Washer "C" (black with large hole). Inspect washers. If they are burred or not perfectly flat, repair or replace them.

**CHANGING WHEELS (Continued)**

4. Each Grinding Wheel purchased should be equipped with a blotter fastened to each side of the wheel. Blotters must always be used between the wheel and the inner and outer clamp washers. Contact surfaces of wheels, blotters and washers must be clean and flat.
5. Always use the exact type of clamp washers that are supplied with your tool. Never substitute flat or odd sized washers. Replace them in the exact order and position shown in Figure 6. Always place hollow sides of washers against wheel.
6. Only tighten arbor nut sufficiently to drive the wheel without slippage. Hold spindle with screwdriver in end slot "D". Do not overtighten.
7. Be sure to replace end covers (see Figure 7). Slide cover in direction of arrow "A" into upper and lower grooves in wheel guard. Push cover toward wheel (arrow "B") with threaded tab inside wheel guard. Replace screw.
8. After installing replacement wheel, put on safety goggles and stand to the side of the grinder, turn switch "ON" and allow wheel to revolve freely for one minute before beginning to grind.
9. If a new wheel has excess vibration, loosen nut and rotate wheel about 1/2 turn on shaft. Retighten nut.

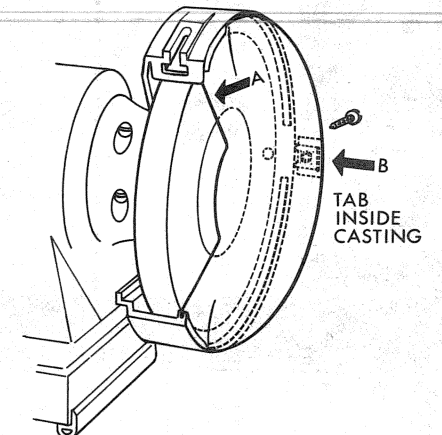


FIGURE 7

**LUBRICATION**

Bench grinder spindles are mounted on lubricant impregnated bearings. No periodic lubrication is required.

**ACCESSORIES**

**GRINDING WHEELS** (5" Diam. x 1/2" Face x 1/2" Arbor Hole). Manufactured by the nation's leading abrasive manufacturers to stringent quality specifications.

Cat. No. 79-555 Coarse — 36 Grit

Cat. No. 79-556 Medium — 60 Grit

**SANDING/POLISHING WHEEL** (4" Diam. x 3/8" face x 1/2" hole)  
Cat. No. 79-255 For sanding, polishing, honing, etc.

**WIRE WHEEL BRUSHES** (1/2" Arbor Hole).

Each wire tuft is locked independently, giving a dense, even brushing surface, and less danger of loose wires.

Cat. No. 70-142 4", Coarse Wire

Cat. No. 70-143 4", Fine Wire

**COTTON BUFF:**

For general purpose buffing and polishing.

Cat. No. U-1322 4" Diam. x 5/8" Face x 1/2" Arbor Hole.

**NOTE:** The above accessories are recommended for use with your Bench Grinder. **CAUTION:** The use of any other accessory or attachment might be hazardous.